

What is claimed is:

1. A method of scanning frames of cinematographic film to generate digital values of pixels constituting
5 images on the film frames, wherein pixels corresponding to defects on the film are identified and the values of such pixels are adjusted to compensate for the defects, the identification of the pixels corresponding to defects on the film being
10 carried out by identifying pixels whose value is beyond a predetermined threshold.
2. A method as claimed in claim 1, wherein the predetermined threshold is set at a maximum which is
15 close to pure white and pixels whose value is higher than the maximum value are identified.
3. A method as claimed in claim 1, wherein the predetermined threshold is set at a minimum value
20 which is close to pure black and pixels whose value is lower than the minimum value are identified.
4. A method as claimed in claim 1, in which pixels which are generally aligned with an identified pixel
25 in the direction of film transport are compared to the predetermined threshold and, if at least some of the said pixels have a value beyond the predetermined

threshold, a defect corresponding to a scratch on the film is identified as including the generally aligned pixels having a value beyond the predetermined threshold.

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5. A method as claimed in claim 1, in which a pixel in the preceding and/or subsequent frames corresponding to an identified pixel is compared to the predetermined threshold value and, if the pixel
10 does not have a value beyond the predetermined threshold value in either the preceding or subsequent frame, the identified pixel is identified as corresponding to a dirt defect on the film.

15 6. A method as claimed in claim 1, in which the value of an identified pixel is compared to the value of the corresponding pixel in the preceding and/or subsequent frames and, if the difference between the value of the identified pixel and the value of the
20 corresponding pixel in the preceding and/or subsequent frame is greater than a predetermined threshold, the identified pixel is identified as corresponding to a dirt defect on the film.

25 7. A method of scanning frames of cinematographic film to generate digital values of pixels constituting images on the film frames, wherein a pixel

corresponding to a part of a scratch on the film is identified and the remaining pixels corresponding to the scratch in that frame are then identified by comparing each of the pixels located in a column
5 generally aligned with the identified pixel and extending in the direction of film transport to a predetermined threshold value and identifying those pixels having a value extending beyond the predetermined threshold value as constituting the
10 remaining pixels.

8. A method as claimed in claim 7, wherein pixels corresponding to the scratch in subsequent frames of the film are identified by comparing each of the
15 pixels in the column to a predetermined threshold value and identifying those pixels having a value extending beyond the predetermined threshold value as constituting the pixels corresponding to the scratch.

20 9. A method as claimed in claim 1, wherein the values of the identified pixels are replaced by values from pixels adjacent the defect.

10. A method as claimed in claim 1, wherein when the defect corresponds to a scratch on the film, the
25 values of the identified pixels are replaced by values obtained by interpolation along the lateral line of

the image in which the pixel to be replaced is located.

11. A method as claimed in claim 1, wherein when the
5 defect corresponds to dirt on the film, the values of
the identified pixels are replaced by values obtained
from the values of the pixels corresponding to the
identified pixels in the preceding and/or subsequent
frames.

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12. A method as claimed in claim 1, wherein when the
defect corresponds to dirt on the film, pixels
surrounding the one or more identified pixels which
represent a blurred edge of the defect are identified
15 and compensated for although the value of these pixels
is not beyond the predetermined threshold.

13. A method as claimed in claim 1, wherein when the
defect corresponds to a scratch on the film, if the
20 width of the scratch exceeds a predetermined number of
pixels, at least one column of pixels from within the
scratch defect is removed, image pixels outside the
scratch defect are moved in to compensate for the
removed pixels, and the remaining pixels within the
25 scratch defect are corrected by using values
interpolated from pixels on either side of the
scratch.

14. A method of scanning frames of cinematographic film to generate digital values of pixels constituting images on the film frames, in which pixels
5 corresponding to a scratch defect on a film frame are identified and the values of such pixels are adjusted to compensate for the defect, wherein if the width of the scratch exceeds a predetermined number of pixels, at least one column of pixels from within the scratch
10 defect is removed, image pixels outside the scratch defect are moved in to compensate for the removed pixels, and the remaining pixels within the scratch defect are corrected by using values interpolated from pixels on either side of the scratch.

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15. A method of correcting for flicker in digital images obtained by scanning frames of cinematographic film, comprising the steps of: identifying frames in which flicker is present; identifying relatively
20 bright regions in those frames whose brightness is above a predetermined level, and correcting digital pixels in those relatively bright regions so as to compensate for the effect of flicker.

25 16. A method as claimed in claim 15, wherein the relatively bright regions of a frame in which flicker is present are separated into those containing objects

which are stationary as regards a sequence of frames,
and those which move during the sequence of frames.

17. A method as claimed in claim 16, wherein the
5 values of pixels in regions representing a stationary
object are replaced by values obtained by
interpolation between the corresponding pixels in the
previous and subsequent frame.

10 18. A method as claimed in claim 16, wherein the
pixels in regions representing a moving object are
rescaled using a constant derived from the ratio of
the average brightness of the moving object in the
images in which flicker is not present to those in
15 which flicker is present.

19. A method as claimed in claim 17, wherein the
pixels in regions representing a moving object are
rescaled using a constant derived from the ratio of
20 the average brightness of the moving object in the
images in which flicker is not present to those in
which flicker is present.